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## **TOWARDS AN ORTHODOX MARXIAN READING OF SUBSUMPTION(S) OF ACADEMIC LABOUR UNDER CAPITAL**

**Abstract:** This paper deploys an orthodox Marxian reading of the concept of subsumption of labour under capital. It does so through a brief, critical overview of the components of the Marxian conceptual instrument of subsumption of labour under capital (formal, real, hybrid and ideal subsumption). Recapitulating Marx's concept, it sheds some light on the consequences of such a reading as a way of understanding the current transformation of the global higher education sector into a capitalist production sector *per se*. The reconstruction is then considered here as an attempt to approximate the specifics of the subsumption of labour under capital within the higher education sector. Moreover, the paper aims at showing that a discussion of the university dominated by capital with reference to the functioning or constituting of markets does not provide real opportunities for the understanding and solution of such problems as precarization, exploitation or acceleration of academic work. Thus, it joins a wider stream of Marxist higher education research and could be seen as a conceptual contribution to a critique of the political economy of higher education.

**Keywords:** Marx; academic labour; subsumption; critical higher education research; higher education.

### ***Introduction***

Higher education research demands today an analogous revolution that had taken place within the domain of classical political economy through the publication of Marx's *Capital*. Higher education dominated by capital's internal drive for self-valorisation desperately needs a project of negative critique (Winn 2014), that will leave the "noisy sphere" of exchange to enter "the hidden abode of production" (Marx 1982, 279). The starting points of this critical project are primarily the categories of academic living labour/knowledge, as both the source of social wealth, as well as the source of capital. It is here the attention of critical higher education researchers should be focused (Szadkowski 2015a).

This approach is not a project developed in a vacuum. Current Marxist scholars researching higher education are less interested in the place and function of higher education within and for the capitalist 'knowledge economy', and more interested in the consequences of the capitalist re-structuring of the higher education system as another sector of production (Roggero 2011; Do 2013; Hall 2015a; Neary 2016; Winn 2013). With the help of a Marxian framework they highlight different aspects of higher education, critically using the theory of value (and/or postulate the ultimate need to go beyond it), at the same time, not losing from sight the horizon of alternatives, not only for the university subsumed under capital but for capitalism itself.

As rightly suggested by Winn (2014, 2): “despite much having been written about academic work, there is relatively little critical engagement with labour itself as the object of critique”. I, too, assume that the lack of a critical approach to academic labour, especially neglecting the recognition of its three-fold location inside-against-beyond the capitalist university, results in ineffective forms of resistance. Through the analysis developed in this article, by pointing at the relevant (not only theoretical but also practical) differences between the different modes of subsumption of labour under capital within the Marxian project, as well as between different ways of their interpretation, I want to offer a “different method of writing and therefore thinking about academic labour. One that starts from a rigorous engagement with the fundamental categories of Marx’s theory” (Winn 2014, 2), but does not stop there, potentially enriching the further political practice of organized academic labour.

I claim that the subsumption of labour under capital, that is the inclusion and subsequent reorganization of a certain kind of productive human or non-human activities within the realm ruled by the logic of capital’s valorization and accumulation drives, is one of these ‘fundamental categories’. Marx drew the concept of subsumption from the philosophy of Immanuel Kant, Frederick Schelling, and also Georg Wilhelm Friedrich Hegel. Within the texts of these philosophers subsumption appears as a dynamic concept, indicating a “process, through which the universal and the particular are combined in a single relationship” (Endnotes 2010). Therefore, Marx uses it in order to show the processes within which the use value (the particular) is subordinated to the exchange value (the universal); living labour to dead labour; the particular and concrete labour process to the process of valorization of capital. Note, however, that the concept of subsumption was not regarded by Marx as something through which one can introduce, explain, and expound his project of critique of political economy, but rather as a concept allowing him to navigate within the maze of his own theoretical system.<sup>1</sup> However, the tendency nowadays is to employ it as a technical concept in the explanatory process, something Marx might have considered an abuse of the term. Taking a more methodological approach like that of György Lukács (1972), Rosa Luxemburg (1972, 150), and recently developed by Michael A. Lebowitz (2003), I suggest that the concept of subsumption can offer critical insight into the contemporary analysis of the domination of capital over labour within higher education.

To proceed with the general argument developed in this conceptual paper, a number of critical assumptions with regard to the contemporary transformations of higher education, first elaborated at greater length elsewhere (Szadkowski 2015b) require revisiting. First, following the theorists of cognitive capitalism (Moulier-Boutang 2011), the emergence and entrenchment of “knowledge economies” should be understood as the next evolutionary stage in the antagonistic relationship between labor and capital. This stage includes areas related to the production of knowledge, affects and social relations, and where the central role is played by mechanisms of capture of the surplus generated by autonomous producers. The methods of capture, depending on the type of activity and the degree of its subsumption under capital, do not necessarily differ to those used by capital for extracting surplus value in industrial production (in earlier periods or even today). Yet following the post-operaists, capitalist rent is found to play an increasingly important role (Vercellone 2010) in the contemporary organization production, where ‘rent’ refers to the form of extraction of surplus that capital uses when it is located outside the direct production processes.

Second, although the massification of higher education and an intensive development of research were crucial for the inauguration of the crisis of Fordism and the transition to cognitive capitalism, today both of these spheres serve as direct production sites dominated by capital (Vercellone 2015). In this context, we find a “transnational association of capitals” (Hall 2014; Szadkowski 2015b) that subsumes higher

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<sup>1</sup> In the *Afterword* to the second edition of first Volume of *Capital*, in order to clearly distinguish between his own method and Hegel’s dialectical method, Marx differentiated the two orders, which made scientific work, namely, the order of inquiry (*Forschung*) and order of presentation (*Darstellung*) (Marx 1968: 18). It could be said that, like a number of structures of Hegelian provenance, the notion of subsumption belongs mainly to the order of inquiry, and not the order of presentation.

education and research as a general global system rather than as specific institutions. This association entails, and implicates, three different forms of capital: productive capital (e.g. private for-profit universities or those involved in transnational for-profit activities of public and private not-for-profit universities, Breneman 2006); money/finance capital (e.g. banks offering commercial student loans, McGettigan 2013; or management of universities endowment funds, Cantwell 2016); and commercial/merchant capital (for example, large international corporations of oligopolistic academic publishers, Peekhaus 2012). All of these types of capitals are involved in different parts of the global higher education system, of course, with a different level of intensity in different parts of the globe.

Third, various forms of hegemonic norms, values, language, as well as institutional forms in which these standards are implemented, strengthened and developed can be tracked within the global higher education landscape (Marginson & Ordorika 2011). Hegemony within the sector is exercised primarily by large American and, to a lesser extent, UK institutions. On the one hand, the hegemony within the field of higher education and science is reinforced by strong capitalist economies of the Anglo-Saxon countries, but at the same time the strength of science and higher education is a contributing factor to the success of Anglo-Saxon economic projects. The institutional forms in which hegemony is embedded include the processes of the evaluative state (Neave 2012) and implementation of the reforms of higher education systems in the paradigm of “New Public Management” (Ferlie, Musselin & Andresani 2008) as well as a model form of a modern research university, that is, the public entrepreneurial university (Clark 1998). Both have been disseminated on a global scale, partly due to the rise of global rankings of universities that strengthen the processes of institutional isomorphism in the global higher education sector (Hazelkorn 2011). These two institutionally sustained forms of hegemony contribute to the process of blurring the boundaries between, and therefore the hybridization of, the private and the public in what used to be the public university (Roggero 2011). This has severe consequences for understanding the relations between capital and labour in the public sector of higher education worldwide.

Finally, the reflections that follow assume that the dialectic between the private and the public, or between the state and the market as coordination mechanisms in higher education, has come to an end (Roggero 2011; Neary 2012; Dardot & Laval 2014; Neary & Winn 2016; Szadkowski 2016). This, in turn, undermines the analytical efficacy of explanations concerning the university in crisis that rest on the concepts of marketization (Jongbloed 2003), commodification (Oliveira 2013) and corporatization (Schrecker 2010), as used both in mainstream higher education research and in some of their critical counterparts.

If the first assumption roots this analysis in the wider reflection on the transformations of knowledge-based economy and provides it with antagonistic optics, the second one depicts the basic types of capital actors in play, both within the higher education and the global economy at large. The third assumption is focused on the various political processes that allow for the installation of the domination of capital over the field and thus allows for speaking about global higher education, while focusing on the transformations rather than on the discussion of various national contexts separately. Finally, the fourth assumption, emphasizes the need for finding another theoretical framework of reference for understanding capitalist processes within the sector, such that would be able to transcend the liberal political economic and political discourses that dominate the contemporary higher education research.

One part of this framework, as I claim, are the lenses provided by the Marxian concept of subsumption of labour under capital. Through them we can observe capital as another mechanism of coordination (along with the state, the market and the academic oligarchy; Clark, 1983) of higher education sector. The second part of this frame is formed by the concept of *the common*, that is an autonomous and immanent reality of living labour/knowledge that lays at the core of contemporary capitalist knowledge production (Roggero 2010; Neary & Winn 2014).

Moving on briefly to another context, the purpose of this paper is also to propose such analytical tools of capitalist relations prevailing in contemporary global higher education, which, on the one hand, go beyond the limitations of more rhetorical than analytical perspectives, such as “the university as a factory”

(Callela 2011). On the other hand, these analytical tools cut through the narratives focused on markets in higher education and mechanisms regulating the sphere of exchange that usually negate their purely capitalist character (Marginson 2004, 2013). I try to convey the Marxian lenses through which one can easily realize that by focusing on the markets, we shift the discussion in the wrong direction. As Marx (1982) pointed out, by referring to the dynamics of the sphere of exchange governed by bourgeois laws and rules, we are not able to understand (and thus exceed) the relations of exploitation within the existing societies where the capitalist mode of production prevails. Similarly, I want to show that a discussion of the university dominated by capital with reference to the functioning or constituting of markets does not provide real opportunities for the understanding and solution of such problems as precarization, exploitation, or acceleration of academic work (Vostal 2016).

Therefore, in the background of a discussion on the Marxian concept of subsumption under capital lays a fundamental question: in what way, and by use of what mechanisms is higher education established as a capitalist sphere of production, and what are the exact ways of subsuming academic labour, in order to valorize capital engaged within the sector (or “transnational association of capitals” Hall 2014, Szadkowski 2015b)? In the course of the analysis it will be clear (somehow atwart but not against Simon Marginson’s recent claims, 2013), that regardless of what are the coordination mechanisms of the individual higher education institutions, irrespective of the nature of their status (private/public), as well as regardless of the mechanisms that drive the sphere of exchange (price or in the case of autonomously understood academic field - status), academic labour, in many ways, is involved in the reality of capitalist production and accumulation of surplus value. To reveal the essence of its inclusion within this productive sphere, the ways of binding and deepening of the relationship between academic labour and capital, should be carefully studied within the framework of various forms of subsumption highlighted in different parts of Karl Marx *oeuvre*.

### ***Marxian account of science and (higher) education as sites of capitalist production***

Before we go any further into an analysis of the concept of subsumption, let us briefly look at the overall Marxian approach to the question of science and education, as well as, to put it more generally, the entire spectrum of immaterial labor sectors, or work involving the production of ideas, affects, or information (Lazzarato 1996). Within the body of Marx’s works, one will not find many references to the sphere of education or an analysis of its reproductive role in the smooth functioning of the capitalist system as a whole or even attempts to criticize its mode of organization. The author of *Das Kapital* is usually satisfied with short references to the ideas of Robert Owen (1824), on the integration of education with the process of factory work, inferring a vision of education similar to the current model of a vocational training (Anyon, 2011). There is no detailed discussion of the institution of the university, higher education, or academic research in Marx’s work either. *The Results of the Direct Production Process* does include a mention of scientists employed by capitalists in privately organized institutions, but the very specific nature of capitalist organization and transformation of these practices lies entirely outside of Marx’s very interest.<sup>2</sup>

Many times, however, Marx did point out the crucial role of science and technology for capitalist development. He emphasized the fact that the capitalist treats the achievements of human civilization,

<sup>2</sup> Andre Gorz highlights that practices associated with the autonomization of knowledge production and subjecting it to a gradual capitalization are almost as old as the production in the phase of a developed industrial revolution. In support of his argument he cites the fact of the creation of Farbenfabriken Bayer industrial research laboratory by Carl Duisberg in 1880 (Gorz 2010, 49). Margaret C. Jacob (2014) went so far as to say that the economic formation that raised out of the industrial revolution was in fact the first “knowledge economy”. Regardless of the assessment of whether Marx’s abandonment at that time of systematic study of this sphere was an important omission or not (see Heinrich 2013), I take the stance that the analytical tools that he developed still enable us to face the problems caused by the capitalist character of knowledge production.

knowledge, and science as a “gift of nature”<sup>3</sup> or a kind of external ‘commons’ that could be easily enclosed. The capitalist appropriate overall social creations of the human mind, harnessing them in its own development, or in other words, transposing social forces (including research) into capital power thus, mystifying these social relations. Ultimately, however, Marx limited himself to an inspiring, but somewhat enigmatic expression, that with the entry of the capitalist industrial production into the phase of real subsumption of labour under capital, science becomes a direct productive force (Marx 1973). However, he had not drawn out the consequences of the fact that the increased relevance of science to the development of capital must be associated with the acceleration of the processes within the field of inventions, and therefore also with the gradual stretching of the capitalist domination into this very sphere, tearing off the nimbus of holiness, and eventually organizing it in the most favorable way for the endless accumulation for accumulation’s sake. Marx passes the fact that within this sphere capital could successfully install its own valorization processes.

Yet, Marx’s particular lack of interest in this issue is hardly surprising. As he noted soberly in his sketches from 1864, known today as the *Theories of Surplus Value*, autonomous processes of immaterial production accounted only for a fraction of the entire capitalist economy of his time and could be ignored without any serious consequences for his main theoretical project.<sup>4</sup> Nonetheless it is impossible to accuse him of any prejudices regarding the immaterial forms of labour itself.<sup>5</sup> It is a matter which should be particularly emphasized, because one of the obstacles that hindered the hitherto development of the Marxist analysis of contemporary transformation of the higher education sector was the deeply held belief in the unproductive nature of labour within the sphere of education and the production of knowledge, or in general outside the production of material products.<sup>6</sup>

The functionality of the sphere of higher education and scientific research in relation to the development of capitalist production is not my main interest here. Rather the focus of the analysis is on capitalist production and the organization of higher education and research. Thus, it will not follow the footsteps of

<sup>3</sup> “Science, generally speaking, costs the capitalist nothing, a fact that by no means ‘prevents him from exploiting it. ‘Alien’ science is incorporated by capital just as ‘alien’ labour is.” (Marx 1982, 508)

<sup>4</sup> Referring to the two types of immaterial production (and productive labour within): a) immaterial production of goods for merchant capital (eg. books for capitalist publisher); and b) immaterial wage labour within capitalist organized institutions (eg. schools, theaters), Marx writes that “all these manifestations of capitalist production in this sphere are so insignificant compared with the totality of production that they can be left entirely out of account.” (Marx 2000, 411). It seems that with the development of capitalism, especially in its contemporary cognitive form, we should completely abandon this anachronistic recommendation.

<sup>5</sup> However, many Marxists have claimed otherwise. For example, Ernst Mandel, believed that production in the Marxian sense, is only the exchange between man and nature, and therefore the only productive labour is that material in form. Moreover, even in the 1970s on the base of the observation of the disappearance of material labor in the West he drew the conclusion that this is a general announcement of the imminent collapse of capitalism (Mandel 1999, 377–407).

<sup>6</sup> Unfortunately, there is no space here to go into details of the discussion on the productive nature of labour in capitalist higher education. David Harvie (2005) believes that the distinction between productive and unproductive labour in capitalist society is determined by the current balance of power within the class antagonism. Capital always seeks to turn every possible productive activity into its own site of production, conversely the working class should strive to turn as much labour unproductive for capital as possible. Each activity has then the potential to be both productive and unproductive for capital. Simon Marginson (1998) indicates a similar tension in Marx’s use of the concept of productive labour, indicating that the productivity of the educational service sector for capital is achieved by subjecting public higher education institutions to privatization and capitalization. Similarly, Bruno Gulli (2009), recognizes the university sector as the last stronghold against the successive march of the real subsumption. Harry Braverman (1998, 284–294) in his analysis of the industrial sector draws attention to the same fact, claiming that the boundaries of production are constantly expanding, with the result that there are still new industries (sectors) and goods. Bearing in mind these observations I assume here the productive nature of labour in the higher education sector subsumed under capital.

Louis Althusser (1971) who gave higher education institutions a place among the ideological state apparatuses, nor Ernst Mandel (1999, 248-273), pointing to the growing acceleration of applied research in the era of late capitalism, neither Glenn Rikowski (1997), who developed a contemporary Marxist theory of the production of the workforce in the context of higher education. The path drawn by Gigi Roggero (2011), directing his attention toward the university as a field organization of the struggle against cognitive capitalism and his reign will also not be followed. All these perspectives should be considered important and some even having great political potential. In the course of further discussion, however, issues of a different nature will be of interest.

As already mentioned, it seems that in the context of the contemporary transformation of higher education systems the networks of the institutions that form them are increasingly forced to reproduce the logic of capital accumulation with all its consequences; in other words, to operate and manage academic labour in a way that seemingly resembles the way how capitalist manage their firms. However, the key to understanding the specifics of capitalist relations within this sector is the notion of the subsumption of labour under capital in all of its four different meanings suggested by Marx (formal, real, hybrid and ideal).

### ***The four levels of analysis of Marxian concept of subsumption***

Reviewing the Marxist literature, we find very different uses and interpretations of the concept of subsumption of labor under capital (e.g. Camatte 1988; Negri 2003; Read 2003; Murray 2004; Vercellone 2007; Hardt & Negri 2009; Endontes 2010; Roggero 2011; Toscano 2011; Fumagalli 2015; Hardt 2015; Hall & Bowles 2016). Therefore, it is useful to discuss briefly the levels of analysis that can be taken. Based on the existing literature, we can draw a systematic map. Let's then try to order the levels of analysis of the concept of subsumption from the most specific to the most abstract: a) *ontic – sectorial*, referring to the constant dynamics of capitalist expansion in the context of emerging and existing production sectors; b) *ontic - historical*, concerning the existing socio-economic formation and their changes over time; c) *ontic – global or systemic*, analyzing the mechanisms of the global subordination of labour and social life to capital, such as the expansion of financial markets or the development of a system of metrics and bibliometric/altmetric databases for science; d) *ontological*, that is the most general level, where consequences of the transformation of work and production on all the aforementioned levels are discussed in purely philosophical terms. While the analysis of processes of subsumption conducted by Marx will be situated largely on the *ontic – sectorial* level, that is specific processes that occur within a particular sector of production, the use of the concept of subsumption by many post-operaist Marxists, such as Antonio Negri (2003), is concerned almost entirely with the *ontological* consequences of subsumption. It seems that in the case of tracking the processes and mechanisms of capital expansion in the higher education sector, it would be much more useful to remain on the sectorial and global/systemic levels. Nonetheless, in order to construct a vision of the alternative to capitalist higher education, it is also necessary to take into account an analysis from the ontological level.

The limitations of much critical higher education research that uses the concept of subsumption come mainly from the mixing up of different levels of analysis. Good examples of this kind of problem can be found in Alberto Toscano's (2011) and Gigi Roggero's (2011) debate. On the other hand, a philosopher of post-operaist orientation, who captured the specifics of the concepts of formal and real subsumption on all of the above levels is Jason Read (2003). As Read points out, the concept of subsumption has an ontological, social, and sectorial nature, allowing not only for understanding the differences between the modes of production (feudalism, capitalism, communism), but also of the internal dynamics of the capitalist mode of production and its internal transformation (2003, 112-113). However, in the following pages an orthodox Marxian reading (one that sticks mainly with the sectorial level of analysis and Marx's method) of the concept of subsumption of labor under capital will be developed. This line of argumentation has not been taken because I believe that it offers a far better understanding of higher education reality than any others. Rather, I claim that any analysis of the dynamics of subsumption could

provide a valid picture of a given political-economic reality, as long as it is consistent and consciously moves within one or between different levels of analysis. One such example would be the use of a post-operaist systemic reading of the production of machinic surplus value (Pasquinelli 2015) applied to the operation of different metrics providers in HE (e.g. Altmetrics, Thomson Reuter, Scopus etc.) with reference to system-wide reality of academic labour. This, however, entails a separate line of argumentation and completely different paper.

### *An orthodox Marxian reading*

Addressing the concept and the phenomenon of the subsumption of labour under capital, specifically in the context of higher education where the capitalist value production is historically speaking a recent event, one needs to always have in mind that taking the categories of ‘formal’ or ‘real subsumption’ as a starting point is at once analytically correct and historically misleading. With reference to industrial production that was at the center of Marx’s interest in the first volume of *Capital*, he emphasized that “merchants’ capital and interest-bearing capital are derivative forms, and at the same time [...] historically, these two forms appear before the modern primary form of capital” (Marx 1982, 267). The derivativeness of the relationships established between merchant and financial capital and living labour does not necessarily mean that they should be put to one side. Especially in the situation when, as Harvey suggests, “it is important to evaluate the positionality of merchants’ and interest-bearing capital within capitalism in general” (2010, 97) because they become (like in the case of financial capital from the 1970’s onwards) or are getting to be (like merchant capital within the higher education) dominant again. However, in the following parts I will follow the logical order of analysis of forms of subsumption suggested by Marx.

### *Formal subsumption*

‘Formal subsumption’ has to create a logical (but not historical) starting point, as it represents the general form of all capitalist production (Marx 1982, 1019). The process of labour appears as capital’s own process and the capitalist becomes the owner of the means of production used within the manufacture and purchaser of the labour power, as well as the manager of the entire process. One of the most important elements of the process of formal subsumption of labor under capital in a particular sector is the establishment of the wage labour relation. As a result, the previously independent and self-organized employees of a given sector enter a relationship of formal dependence on a capitalist.

Within the movement of the formal subsumption of labour under capital a community of people is transformed into a community where the social relations are mediated through money. Under this framework, however, certain people are confronting each other as “capital” and “labour” (Marx 1982, 1020; 1996, 95), which means that “a mode of compulsion not based on personal relations of domination and dependency, but simply on differing economic function” (Marx 1982, 1021) is established. Furthermore, “there is no fixed political and social relationship of supremacy and subordination” (Marx 1982, 1026). Thus, social relationships are mystified by capital in a proper sense (Marx 1982, 1020); that is a concrete abstraction, capital, achieves a perverse ability to subordinate a specific sector of production and at the same time to present itself as the ultimate truth of it, meaning, it is capital that seems to possess the sole ability to self-valorize. In this way, objectified labour (capital) gains the ability to use living labour (labour power).

In essence, what’s really important for the analysis of the capitalist specificity of contemporary higher education is that in formal subsumption the “available, established labour process” (Marx 1982, 1021) is subsumed under capital in its pre-capitalist shape. As Read vividly puts it, formal subsumption “is a specific articulation of the fundamental elements of the capitalist mode of production against an alien terrain... [it] is capital at the interstices of other modes of production” (2003, 108). At this stage, both the dynamics and absorbed form of labour processes are preserved. This is really important when we think about the higher education sector’s meeting with capital. The starting point is always a given sector of

production with its own internal mechanisms that rule it. For this reason, it is up to capital to adapt to this reality and recreate it for its own purposes of valorization and accumulation. Despite some serious claims by higher education researchers (Marginson 2013), status competition and prestige distribution within the sector pose no intrinsic limits for capital that it would not be able to overcome in the near future.

What really changes, however, at the moment of formal subsumption is that the existing labour processes and production are conducted now in continuous cycles, and the hours of labour are extended and their intensity increases (Marx 1982, 1021; 1026). In the higher education context these processes are perceived often as an acceleration of academic labour (Vostal 2016). The crucial point here that should be stressed is that of the relationship between capital and labour in higher education. The meeting between these two opposite sites is in fact taking place on a well-defined ground: within the beaten habits and rules governing the pre-capitalist life of science and education. The university and more broadly the academic community are among the oldest institutions in the Western world: they are defined by a strong internal organization and are relatively resistant to change. Therefore, capital, at first, does not attempt to decompose them; formal capitalist domination over the field does not take the shape of turning the university into a factory-like enterprise, but rather adjusts existing methods of articulation of this community and harnesses them for its own purposes of self-valorization.

The consequence of formal subsumption is that it is possible to extract surplus value from labour power in the form of ‘absolute surplus value’ that is obtained mainly by the extension of working time and an increase in the intensity of work. As a result of the growing scale of the production process (Marx 1982, 1022), both in terms of the degree of capital involved, and the number of workers employed (Marx 1982, 1027), a situation is achieved in which the capitalist himself ceases to be one of the workers, and begins to deal exclusively with the coordination and organization of trade (Marx 1982, 1027). One can say, therefore, that he or she is supposed to play the role of the administrator of the production process. Within the sectors of immaterial or biopolitical production (like higher education and science), however, where extraction of surplus value is highly dependent on the degree of the autonomy of living knowledge, this function, even under formal subsumption, becomes more and more artificial and politically imposed.

Marx emphasized that the more the objective (means of production) and subjective conditions of labour (means of subsistence) are opposed to the worker as capital, the more the relationship between him or her and capital is shaped by formal subsumption (Marx 1982, 1025). In addition, it should be noted that under the process of formal subsumption, labour and the production process get subordinated, as far as possible, to the rule of the law of value. The production process is increasingly forced to correspond with the social necessary labour time needed for the production of certain goods and services (Marx 1982, 1026). In the context of the global higher education system, adaptation to the requirements of socially necessary labor time is carried out using a complex system of measures and metrics (De Angelis & Harvie 2009; Burrows 2014; Do 2013, 2015). However, time here does not necessarily create the sole criteria of social necessity that academic labour faces. Especially within the context of academic labour engaged in research activities it is rather a complex mix of time per differently measured impact of produced output (publishing in the “right” journals, with high impact factor, getting a “proper” share of citations, twitter quotes and other altmetrics etc.) that valorize factions of academic labour.

### *Real subsumption*

The second form of subsumption is ‘real subsumption’, which is, as Marx writes, a “specifically capitalist mode of production” (Marx 1982, 1019). Unlike its formal phase, this is not an autonomous form of subsumption of labour under capital. In order to constitute real subsumption in a given sector a formal subsumption process must have taken place earlier. It can be assumed that real subsumption occurs through the quantitative expansion of formal subsumption in a particular sector - the quantity transforms into quality (Marx 1982, 1021; Read 2003, 110). This specifically capitalist mode of production, according to Marx, can subjugate society as a whole (Marx 1982, 1022), which would be consistent with



the ontological readings (Negri 2003; Fumagalli 2015). Yet, real subsumption can also be analyzed simply within a certain sector of production.

Simon Marginson (2004, 182, 193-197) observed that only a narrow slice of the global higher education sector could be described as capitalist and oriented exclusively around the processes of valorization based on the employment of wage labour. The purely capitalist and for-profit activity of higher education institutions is indeed a sphere limited to private for-profit universities or the transnational free-market functioning of public institutions (Cantwell & Slaughter 2012). Therefore, one can legitimately ask whether the intrinsic limits of the higher education sector (public good character of produced knowledge and status competition) and political factors (importance of higher education and science for national political elites) associated with those limits (Marginson 2013) makes the real (or even formal) subsumption of academic labour impossible.

In the stage of real subsumption, the further development of the process of mystification becomes far more intense. The worker confronts now not only the effects of his own work in the form of capital, but social forces and their products as a whole begin to confront him as private property and the effect of capital (Marx 1982, 1024). This is a result of the transformation of the production process through the introduction of the products of science and technology, resulting in the overall development of the social productive forces. What follows, as Marx puts it, is “the transformation of production by the conscious use of the sciences” (Marx 1982, 1024).

It is no coincidence that the for-profit private sector - because of its overwhelming desire to increase the scale of commodity production, the need to intensify the labour process, and to reduce the general costs - captures all technological innovations in the field of communication and media. These technological innovations are given a capitalist character and consequently used in order to transform labour processes. Examples may include a correspondence education system disseminated in the United States in the 1930s (Noble 2001; Fisher 2006) and the first experiments with *online* education that began in 1989 at the University of Phoenix (Breneman 2006, 73). Growing commercial activity and the global expansion of the number of public institutions is the most important reason for the creation and dissemination of MOOCs, massive open online courses (Hall 2015b), which are digital education machines fueled with human labour. The increased imposition of technology drastically changes the conditions of academic labour at many universities, igniting academic staff protests reminiscent of the Luddites movement from the early era of the industrial revolution. Even if this is just journalistic rumor, Coursera Founder Daphne Koller (Havergal 2016), said recently that “the technological barriers to online provision of full degrees have been finally overcome.” Great experiment in partial mechanization and outsourcing of academic teaching labour, according to Koller, could finally bring the management of hegemonic top universities its greatest fruits. The potential for an enormous expansion of income generation through selling their degrees globally with the use of nearly automated digital machines fueled by outsourced precarious academic labour is getting to be at hand. Here we find status competition the basis, rather than an intrinsic limitation, for the development of capitalist production within higher education sector i.e. certification by prestigious universities of the completion of an open access academic course that creates a source of profitable activity for public and private universities.

Technological transformation of academic production, of course is not limited to MOOCs and alike, but includes, for example, automated, computerized evaluation of students' written work (Shermis & Hamner 2012) or the influence of the widespread use of Google Translate in scientific work as a response to the dominance of English as an academic *lingua franca* (Mundt & Groves 2016). This process goes hand in hand with producing just for the sake of expanding the base of the production of surplus value, which is also a feature of formal subsumption. At the contemporary university this type of process can be recognized in the intense and excessive production of published research results, which is linked largely to the expansion of the base for the extraction of surplus by the oligopolistic academic publishers (Larivière, Haustein & Mongeon 2015) that forms the merchant fraction of “transnational association of capital.” This kind of production for production's sake, proper for the stage of real subsumption, is, as the author of *Capital* consciously remarks, the antithesis of productive development of the human individual (Marx

1996, 110). Dehumanizing production for the sake of production, publishing just to get published in today's accelerated academia seems to be an excellent confirmation of this thesis.

There is no necessary corollary between one and the other form of subsumption in the sector. The very formal subsumption of a certain sector does not necessarily entail a transition to real subsumption, nevertheless real subsumption always needs the formal as its primary stage. However, Marx did not consider these two modes in any deterministic linear way. Domination of labour by capital could stay at the formal level if this would result in greater surplus value extraction. This will become clearer when we examine the mutual relations between formal and real subsumption.

### *Mutual relations of formal and real subsumption*

Before moving on to analyze the other two forms of subsumption (hybrid and ideal), a closer look at the mutual relations and entanglements of formal and real subsumption needs to be undertaken. As pointed out above, this conceptual pair cannot be treated simply as an opposition between 'undeveloped' and 'developed' forms of subsumption. Nonetheless, theorists who use these concepts in this progressivist way can be easily identified (e.g. Camatte 1988; Vercellone 2007). It seems, however, that this approach might be a theoretical and practical blind alley, which is a result of a mixing up of levels of analysis. Types of subsumption in each case must relate to the strategy, which capital is forced to use when confronted with the tendency of the rate of profit to fall (Marx 1981). When the overall rate of profit is falling in a given sector (and it falls inevitably, among other reasons due to the use of machines and corresponding reduction in the amount of employed labour), capital has to flee to another sector where the labour may be subsumed only formally. Therefore, from the perspective of valorization of capital both forms of subsumption are useful and complementary. And to put it in a more political way, it can be said that their functionality is always a result of the level of class struggle within a given industry.

Let's take a look at the entanglement of two forms of subsumption and its consequences. According to Marx,

At any rate, if we consider the two forms of surplus-value, absolute and relative, separately, we shall see that absolute surplus-value always precedes relative. To these two forms of surplus-value there correspond two separate forms of the subsumption of labour under capital, or two distinct forms of capitalist production; And here too one form always precedes the other, although the second form, the more highly developed one, can provide the foundations for the introduction of the first in new branches of industry. (Marx 1982, 1025).

In the quote above Marx is accentuating the immediate treatment of the two forms of extraction of surplus value as co-existing phenomenon, which cannot be analyzed as something abstract and separated. Production of relative surplus value necessarily requires and involves the production of absolute surplus value. These are complementary strategies and even in the most developed mode of production one cannot imagine an independent extraction of just relative surplus value. On the other hand, what is very important is that real subsumption in the industrial sector causes a tendency for the rate of profit to fall, simultaneously forcing capital to explore new sectors and branches of production that can be subordinate in a formal way and thus make higher profits possible. It is in this way that the growing involvement of capital within the sector of higher education and science should be seen. Generally speaking, capital, driven by continuous class struggle within a given sector, as well as constant technological innovations, needs to expand its general forms of domination to further areas of social life.

In the following fragment Marx expressed the sector-specific nature of the process of subsumption, which captures the essence of capitalist expansion:

It is precisely the productivity of labour, the mass of production, of population and of surplus population created by this mode of production that constantly calls new branches of industry into being once labour and capital have been set free. And in these new branches of industry capital

can once more operate on a small scale and pass through the various phases until this new industry too can be operated on a social scale. This process is continuous. At the same time, capitalist production has a tendency to take over all branches of industry not yet acquired and where only formal subsumption obtains. Once it has appropriated agriculture and mining, the manufacture of the principal textiles etc., it moves on to other sectors where the artisans are still formally or even genuinely independent. (Marx 1982, 1035-1036)

In the long term, the development of a given industry leads to a shift in the interest of capital, forcing it to explore further branches and each time the same cycle of capitalist transformation is repeating itself, going through the stages: from the small forms of production based on archaic and autonomous manufacturing methods, where what changes is an installation of a commodity form and wage labour relationship, proceeding to further production on a large or even social scale. Yet, this shift between branches, of course, is not limited to areas of material production. Capital absorbs every potential autonomous area of producing, and imposing its own processes of valorization.

Marx discusses this aspect of the inevitable expansion of capital, which covers more and more areas, in the following section:

The material result of capitalist production, if we except the development of the social productive forces of labour, is to raise the quantity of production and multiply and diversify the spheres of production and their sub-spheres. For it is only then that the corresponding development of the exchange-value of the products emerges - as the realm in which they can operate or realize themselves as exchange-value. (Marx 1982, 1037).

Generalizing capitalist production within a sector produces a surplus of (redundant) employees; that is, 'unproductive' workers who do not contribute to the processes of valorization: "Since the purpose of productive labour is not the existence of the worker but the production of surplus value, all necessary labour which produces no surplus labour is superfluous and worthless to capitalist production." (Marx 1994, 104). This happens when the work of a given worker is not employed in a direct production process of commodities or when the goods produced this way attracts such a small number of buyers that it is impossible to cover the costs of his or her labour. In the context of the development of the higher education sector subsumed under capital this particular mechanism gradually affects the marginalized humanities subjects. A recent, but well known case of Japanese universities scaling back or closing down departments in the humanities and social sciences since 2015 is one illustrative example.

Moreover, the dynamics of the process of subsumption demands increases of the efficiency of labour within a given period of time. Marx writes that:

All the methods by which relative surplus value, and therewith the specifically capitalist mode of production, is developed, can be reduced in the most abstract form to this, that this mode of production aims at bringing the value of the individual commodity down to its minimum, and therefore producing as many commodities as possible in a given labour time, or operating the transformation of the object of labour into a product with the smallest possible quantity of labour in the shortest possible labour time. (Marx, 1994, 109-110).

Moreover, Marx later admits that it is a 'law' that operates in all spheres, where capital extends its domination (Marx 1994, 110). The inherent contradiction was apparent to Marx in the fact that due to its own effective expansion capital lowers the value of commodities to a minimum and simultaneously aims at self-valorization and profit extraction. Since the main objective is the production of surplus value, it is an understandable desire to ensure that the subsequent products contain the smallest possible amount of paid labour, and the greatest amount of unpaid labour. Therefore, the logical tendency of capitalist development is to move towards the greatest absorption of unpaid labour contained in the commons and to focus on their appropriation. This is the most 'profitable' activity because the reproduction of the commons is based entirely on the social processes located outside the sphere of direct production. In the context of larger economic transformations (transition to cognitive capitalism), post-operaist theorists call

this phenomenon a “becoming-rent of profit”, seeing that nowadays “rent constitutes structural dimension of the logic of valorization of capital” (Vercellone 2010, 113) in cognitive capitalism.

Perhaps the most important part of Marx’s analysis of the process of real subsumption is that he assumes that it unveils the horizon for an alternative to capitalism:

The positive result here is a fall in the labour time needed to produce an increased quantity of means of subsistence; this result is attained through the social form of the labour, and the individual's ownership of the conditions of production appears as not only unnecessary but incompatible with this production on a large scale. (Marx, 1994, 108).

The social scale of conducting academic labour within the capitalist production of science has at least two separate aspects. First is the development (especially in natural sciences) of “hyperauthorship”<sup>7</sup> that slowly undermines the idea of efficiency of the individual authorship form which is one of the foundations of past and current academic mechanisms of measure and prestige distribution that fuels the recent expansion of capitalist oligopolistic publishers. Second is the emergence of global science and its paradigm of open production, that is an “alternative non-proprietary model of cultural production and exchange” that “threatens traditional models of intellectual property and it challenges major legal and institutional means such as copyright currently used to restrict creativity, innovation, and the free exchange of ideas” (Peters 2009, 203; 2011). But this, rather than remaining at the level of social-democratic reformist proposals, could and should form a point of departure for academic labour projects that would not only head towards a post-capitalist higher education and science (Neary & Winn 2012), but also join the wider anticapitalist struggles that take place within society and economy at large. It is only there where the open social production of science will find its fulfillment, but this will not be possible without an organized class struggle.

Marx, however, continues:

The alien property of the capitalist in this labour can only be abolished by converting his property into the property of the non-individual in its independent singularity, hence of the associated, social individual. This naturally brings to an end the fetishistic situation when the product is the proprietor of the producer, and all the social forms of labour developed within capitalist production are released from the contradiction which falsifies them all and presents them as mutually opposed (Marx 1994, 109).

Real subsumption is a prerequisite for the transition to an alternative production system – a social or cooperative form of production (Winn 2014; Winn 2015; Neary & Winn 2016). The basis of individual ownership of social productive forces that comes to the surface during real subsumption is seen through the eyes of the workers of a given sector as something that should be abolished. It reveals the immanent possibility of the social and non-individual nature of the ownership of the productive potential, which could remain at the disposal of the workers themselves. Marx, however, clearly indicates that for the process to begin, it is necessary to sufficiently develop the material base of production. We find here also the “social individual”, commons-oriented form of producer, as a subject of a ‘post-capitalist’ reality. Real subsumption is thus a phenomenon that draws a path towards the horizon of the alternative to the capitalist relations of domination.

### *Hybrid subsumption*

As mentioned earlier in this paper, according to Marx, there are two other, rarely acknowledged, forms of subsumption of labour under capital. In one of the subsections of the *Economic Manuscripts of 1861-1863* Marx analyzes the ‘hybrid’ (*Zwitter*) forms of subsumption (Marx 1982: 645). It is a term that defines the

<sup>7</sup> In 2015, for the first time a single research article, authored by 5000 individuals, was published (Castelvecchi 2015).

way in which capital includes in its horizon of interest a site of productive activities, which it is able to take advantage of, while not yet exercising direct control over its course. In this case, formal subsumption is “not yet reached” (Marx 1982, 1023).

It should be noted that hybrid subsumption is not the transitional form between formal and real subsumption, thus they are not leading to an automatic occurrence of specifically capitalist mode of production in a given sector (Marx 1994, 116). They are more like “forms of transition to capitalist production” (Marx 1994, 116), where it is not a wage labor relation, but rather a purchase/sale or loan/debt that formally dominates the space opened between the actual producer and the entity that benefits from his or her activities. However, there is no direct capital/labour relationship here, and labor is not exploited in a classic Marxian sense. As Marx writes: “this form can be transitional to the capitalist mode of production. It is itself the extraneous produce of the capitalist mode of production.” (Marx 1994, 119-120). Hybrid forms of subsumption not only precede the capitalist mode of production, but also reproduce themselves within it, and are partly reproduced by it (Marx 1994, 116). We can divide them, therefore, after Murray, into two separate categories: a) transitional (*Uebergangsform*) - which link the process with capitalist social relations; and b) accompanying (*Nebensform*) (Murray 2004, 261). Their extraordinary functionality for the ‘normally’ functioning capitalism, including academic capitalism should be emphasized here.

The two most important examples of capital valorized on the base of a hybrid mechanism of subsumption of labour is, on the one hand usury or financial capital, whose owners are primarily concerned with lending producers the means of production or money for the purchase of means of production. In this context, we can distinguish two activities of financial capital as part of a dynamic landscape of contemporary higher education: one is the functioning of capital that develops on the basis of an extensive system of student loans (McGettigan 2013). The second, linked to the advent of neoliberalism that increased the importance of financial markets within the capitalist economy, is the development of ‘endowment management’ as a way that “universities engage in market activities to generate profit in order to secure advantage over competitor institutions by amassing wealth” (Cantwell 2016, 173).

On the other hand, there is commercial or merchant capital that in many cases constitutes, from the historical point of view, a form of inclusion of a geographical area or a sector into a fully capitalist relation. The owners of this type of capital are engaged in ordering products, while providing the raw materials or production/cooperation patterns, and then receive the product for a fee and sell it realizing surplus. To find an example, it’s enough to look at the contemporary domination of oligopolistic academic publishing capital (Larivière, Haustein & Mongeon 2015) over academic labour. Companies like Elsevier are providing a reference manager (e.g. Mendeley) to speed up the production processes of written outputs and to make sure that the most important parts of academic measure (references) are inserted properly. Reference managers are also a gigantic source of metadata that not only allows a greater degree of control over academic labour but also fuels metrics that give rise to a severe global competition. Other firms provide academic writing support software (e.g. Scrivener), that promote the standardized language of description or the structure of ‘proper peer-reviewed’ articles (see e.g. all the handbooks on the ‘improvement’ of academic writing skills). The contemporary hybrid subsumption of academic labour by merchant capital is conducted in a more cunning way than it was centuries ago in relation to other sectors of production. The entanglement of academic publishers in a game proper to the academic field, where the objective is the maximization of prestige, makes academic producers willing (or coerced by a national higher education Ministry through a variety of procedures of evaluation) to give the results of their research work to capitalist publishers for free. Or even paying a fee in the form of an *Article Processing Charge* or *Book Processing Charge* (Eve 2014). However, the way in which capital instrumentalizes the academic status game for its own purposes of valorization is the subject for a separate and extensive discussion.

*Ideal subsumption*

The last, fourth, form of subsumption to which reference can be found in various texts of Marx is ‘ideal subsumption’. Although Marx mentions it many times, it is hard to recognize that this could really be seen as an autonomous concept of analytical use. Ideal subsumption is used by Marx primarily as a tool to debunk his opponents. It is used for the criticism of bourgeois political economists’ unauthorized references to spheres of labour and production as capitalist, when in reality they are not. At first sight, we are therefore faced with a purely ideological form of subsumption, whose main field of reference is the realm of discourse and social imagination. The category could be easily dismissed if we took an idealist or a crude materialist stance. However, as rightly emphasized by dissident Soviet Marxist, Evald Ilyenkov (2012, 149), “the ‘ideal’ – or the ‘ideality’ of phenomena – is too important a category to be handled thoughtlessly and carelessly”; thus, it cannot be addressed simply as the result of some mental conceptions or something limited to the sphere of consciousness, but has to be seen in its full dialectical relationship with the material. According to Ilyenkov ‘ideality’ should be considered as a “very peculiar and very strictly established relationship between at least two material objects (things, processes, events, states), within which one material object, while remaining itself, performs the role of a representative of another object” (2012, 155). Material processes, thus, produce not only material effects but ideal products as well. “The act of idealisation of reality (the process of transforming the ‘material’ into the ‘ideal’)” occurs “and then, having arisen, the ‘ideal’ becomes a critical component of the material life-activity of social man, and then begins the opposite process – the process of the materialisation (objectification, reification, ‘incarnation’) of the ideal.” (2012, 158). This processes of idealisation and materialisation occurs in dialectical cycles, in consequence, influencing and shaping the material reality of a given sector or an economy at large. Taking into account the suggestion by Ilyenkov (2012, 161), that in Marx’s work it is the value-form itself that has a complete ideal character, we can see that activities of this kind, I believe, have a strategic function in the context of contemporary transformations of public higher education. This process gets further clarified when Marx notes that:

[W]ithin capitalist production there are always certain parts of the productive process that are carried out in a way typical of earlier modes of production, in which the relations of capital and wage-labour did not yet exist and where in consequence the capitalist concepts of productive and unproductive labour are quite inapplicable. But in line with the dominant mode of production, even those kinds of labour which have not been subsumed by capitalism in reality are subsumed *idealiter*” (Marx 1982, 1042) [*translation modified*. K.Sz]<sup>8</sup>.

The passage above reveals Marx’s belief in the all-encompassing nature of the social relations of capital; it also gives some insights into how the abovementioned dialectic of idealization and materialization with reference to subsequent branches of production occurs. When in a given formation it becomes the dominant socio-economic relationship of production it is used as an ideal model in relation to which all non-capitalist sectors of production become self-organized, organized or reorganized. Subsumption of labour under capital (in both formal and real forms) can provide a logical framework projected onto, for example, the activities of public authorities in relation to a different sectors of activity (as in the case of market-oriented reforms of the public higher education). Although the direct processes of production of surplus value will not occur and there will be no actual extraction of surplus in the form of profit from the wage labour employed, the very relations of production may have to undergo transformations, that in effect will make them resemble the two main forms of subsumption (formal and real). Thus, it could be claimed that the phenomenon of ideal subsumption can play an important role in preparation of a given sector for a processes of subsumption of labour within it under capital in formal and/or real terms.

<sup>8</sup> The last, crucial part of the quoted sentence in English translation is “those kinds of labour which have not been subjugated by capitalism in reality are so in thought.”. The German original text Marx used a French expression ‘*idealit  r*’ that could be translated literally as ‘ideally’ / ‘in ideal mode’.

Patrick Murray's categorization of the forms of ideal subsumption seems helpful. He differentiated between: a) ideal subsumption of pre-capitalist economic formations under capital; b) ideal subsumption of non-capitalist production processes, which exist alongside the capitalist, that includes also an ideal subsumption of labour under capital in the case of the self-employed worker (Marx 1982, 1042); and c) ideal subsumption that takes place within a capitalist firm<sup>9</sup> (Murray 2004, 265-266). In connection with the strategy of a sectorial reading of subsumption the most useful forms for further considerations within the realm of higher education seem to be form b). The operation of public higher education organized according to the logic of New Public Management reforms could be considered as ideal subsumption of type b). Furthermore, when an unemployed researcher has sweated over winning a research grant acquired outside any institutional frame, we can also observe this as ideal subsumption type b).

The ideal form of subsumption of labour under capital lays beyond the scope of interest of most authors who use the concept of subsumption to analyse changes within the contemporary higher education sector. Yet it can provide a useful starting point to study various types of institutional strategies of individual universities, as well as strategic documents of certain ministries (laws, reform packages). Both treat the public sector of higher education system as if it were a for-profit oriented form of production with valorization occurring there already. It is this process of ideal subsumption that other scholars of higher education perceive as the hybridization of the public and the private within the sector (Roggero 2011) that sets the stage for the efficient colonization of higher education systems worldwide by capital. Transnational capital depends primarily on these processes, on the way public national systems are structured, and it is not particularly striving to take full control over them. Subject to the laws of market competition, as well as forced into increasingly intensive diversification of its sources of revenue (including working out profit from teaching activities based on hiring wage-labour), the institution of the public university, transformed according to the New Public Management paradigm, conforms to the ideal subsumption of labour under capital.

## Conclusion

I have shown that the various forms of the Marxian concept of subsumption provide a useful tool for the analysis of the capitalist transformations of contemporary higher education. While the paper has covered just a few aspects of the capital/labour relation in the context of the contemporary university, the categories that have been worked out here can be used successfully for further research purposes. Although the typical post-operaist approach, with its sensitivity to the conflictual nature of the transformation associated with entering the era of cognitive capitalism, is a source of many valuable insights (Hall 2015a), it has been shown that a reading that understands subsumption as an all-encompassing condition or a specific historical epoch has serious limitations. It is now time to make a preliminary attempt to answer the key question: how in accordance with the letter and spirit of Marx's texts, i.e. an 'orthodox' reading, are we to conceive of the subsumption of labor under capital, especially within a higher education context?

First of all, it has to be noted that the concept of subsumption should be used for an analysis of a dynamically changing landscape of capitalist production. It allows us to grasp the development and dissemination of capitalist relations based on the form of wage labor and the form of value in the various sectors of human activity. At the same time, any generalizations should be avoided and, following Marx,

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<sup>9</sup> Although this point might appear to be contradictory, Murray (2004, 266) rightly quotes here a long fragment from Marx's *1861-63 Economic Manuscripts*: "One curiosity of a capitalist production process is that, within it, goods and services no longer actually function even as commodities. However, goods and services functioning within a particular department within a capitalist firm may be ideally subsumed under the capital form and calculations made as if the department were its own capitalist firm, in order to locate the firm's profit centres. Because it is typical for industrial capitalists to rely on external financing, those who are self-financing may ideally subsume a portion of their own profits under the form of interest".

we should assume that there are no socio-economic formations in which real subsumption in its pure form exists on a social scale.

In an orthodox reading, concepts of subsumption serve primarily to build a map of the sectors of human (and non-human) activities with capitalist attributes, as well as to indicate the degree of their penetration by capitalistic relations (formal/real). Attention should be paid to the fact that while a given sector of production may remain for a long time at a stage of formal subsumption (without having to undergo real subsumption), the move “back” from real to formal subsumption of labour within a given sector, historically speaking, can only occur in exceptional cases and usually involves violence or violent social change. An example may be deindustrialization during the Cultural Revolution in China (Eyferth 2003). Therefore, if there’s a move back from real to formal subsumption, it means primarily that the flow of capital occurs from a highly developed dominant sector to another, newly hegemonic sector of production<sup>10</sup>, where labour processes are not yet technologically transformed by capital. Real subsumption of a given sector, thus raising its dominant relations to the level of mass technologically mediated production, opens up opportunities to develop within it the (post-capitalist) potential to exceed the limitations of the politically imposed law of value.

However, the means of subordination of labour cannot be reduced just to the two main forms of subsumption. The parallel phenomenon of hybrid subsumption, that is used by merchant and usurer capital, demands a separate analytical paper. Perhaps during times when merchant and financial capital dominate the capital located in production (Harvey 2010) the usefulness of these categories is even greater than the two basic types of subsumption.

Capital is primarily a social relationship, so in the formations of capitalism’s logic permeates the whole of social and economic realities. This does not mean, however, that in all areas capitalist relations of exploitation and valorization processes based on living labour are to be found. The mere occurrence of the wage relation is not a sufficient condition. Sectors where the subsumption of labour under capital has been modeled ideally are guided by a different logic. This does not exclude, of course, that the ideal subsumption in a given sector may be, for example, the preparatory step towards the subsumption of certain processes to capital functioning at a different level. In this way, the reforms of the New Public Management in higher education could be understood. They represent the preparation of academic labour for the requirements of a merchant capital fraction (large oligopolistic academic publishers) of a “transnational association of capitals”.

Where each of the processes of capital’s domination over living labour are studied, the type of the subsumption must be defined. This is a necessary caution. However, it is not to deny workers from the public higher education sector the status of productive workers and to exclude them from the ranks of the working class. Rather, it is necessary in order to correctly identify the real object of opposition and critique and to avoid combating capital where its characteristic relationships do not exist. The complementary use of the four above-characterized types of subsumption allow us to develop an analysis that maps correctly onto the reality of capitalist production within contemporary global higher education systems. However, it is certainly not the only approach possible.

What are the benefits of an orthodox Marxian reading of subsumption for critical higher education research? Firstly, it seems that looking through the lenses of subsumption of labour under capital allows for a precise periodization of development and intensification of relations of domination of capital over labour in a national higher education sector. Secondly, using the full range of concepts of subsumption, due attention could be paid to the indelible role of transitional and accompanying forms of subsumption of labour under capital. Using the category of hybrid subsumption both the role of merchant capital in the progressive changes in the conditions of academic labour, as well as the financial capital developing somewhat parasitically on the base of credit granted to students, can be precisely analyzed. Thirdly, thanks

<sup>10</sup> In the sense in which the post-operaists speak of hegemonic sectors of production, see Hardt 2015; Szadkowski 2015c.



to the Marxian concept of the ideal forms of formal and real subsumption of academic labour under capital, we can analyze the situation of academic workers in the public sector of higher education. Finally, the study of changes within the higher education sector based on the concept of subsumption of academic labour under capital allows us to go beyond a narrow sectorial understanding of the problems affecting academics and involving them into a broad front of class struggle against the capitalist class.

Diverse and multifaceted processes of subsumption of academic labour under capital, especially with the increase in the activities of a “transnational association of capitals”, permeate the entire landscape of contemporary higher education, regardless of their public or private character. It becomes clear, therefore, that slogans saying that we have to bring back the public mission of the universities will not save the sector from the severe thrust of capital. Public higher education is not only receptive to the pressures exerted by transnational capital, but also actively contributes to the spread of capitalist domination over the sector by presenting struggle for academic prestige colonized by capital as a race for excellence in science. In order to overcome the crisis of the university, there is a need to mobilize an academic subject antagonistic to capital, which could become the agent of progressive change. However, this task can only be done by a subject focused on the common and a communist ethos of science (Szadkowski 2016).

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